

REMARKS

Reconsideration of the application is requested in view of the remarks that follow.

Claims 66-77 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sato et al. (US 5,766,360) in view of Toprac et al. (US 6,304,999) and the acknowledged prior art of the instant specification. For the reasons set forth below, Applicants traverse the above-stated rejection.

Each of Applicants' previously presented independent claims 66, 71 and 76 recites a wafer processing tool for processing a sequence of wafers. In accordance with the claimed invention, a wafer in the sequence is processed by at least one wafer processing station included in the tool and then provided to a wafer inspection station that occupies one of the wafer processing slots of the same tool.

Independent claim 66 recites:

“the wafer inspection system including an optical measurement system forming a scatterometry instrument that is moveable to specified locations over a wafer in the wafer inspection system in order to direct a light beam as a spot onto patterned features of the wafer and obtain characteristic optical signatures for the illuminated patterned features...”

Independent claim 71 recites:

“an optical measurement system forming a scatterometry instrument that is moveable to specified locations over a wafer in the inspections station in order to direct a light beam as a spot onto patterned features of the wafer and obtain characteristic optical signatures for the illuminated patterned features....”

Independent claim 76 recites:

“positioning a measurement spot of an optical head of a measurement instrument within the wafer inspection station over at least one location on the wafer and measuring an optical characteristic of the wafer at each location using a scatterometry instrument....”

Thus, each of Applicants' independent claims 66, 71 and 76, and hence claims depending therefrom, is directed to aspects of a wafer processing tool that includes an integrated measurement system that specifically includes a scatterometry instrument with moveable optical

features located within the integrated measurement system for obtaining optical signatures from a wafer within the measurement system.

The primary reference cited by the Examiner, the Sato et al. reference, discloses the utilization of a wafer inspection station in a wafer processing tool. However, based upon our review of the Sato et al. disclosure, it is Applicants' good faith belief that Sato et al. neither teach nor suggest an integrated measurement system that includes a scatterometry instrument with moveable optical features located within the integrated measurement system for obtaining optical signatures from a wafer within the integrated measurement system, as claimed by Applicants.

The Toprac et al. reference is cited by the Examiner for its teaching of a stand-alone scatterometry instrument for inspecting and controlling the processing of wafers. However, upon review of the Toprac et al. reference, Applicants submit that this reference does not disclose a scatterometry station in a multi-station tool that relies on moveable optical features to obtain optical signatures from a wafer within the station.

It is well established that a combination of reference teachings is improper unless the references themselves suggest such a combination. See, for example, *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Applicants submit that neither the Sato et al. reference nor the Toprac et al. reference, considered individually or in combination, either teaches or suggests a combination of the teachings of the two references to provide a wafer processing tool that integrates a measurement station that includes a scatterometry instrument that includes moveable optical features located within the integrated measurement station for obtaining optical signatures from a wafer within the integrated measurement station, as claimed by Applicants.

For the reasons set forth above, Applicants submit that all claims now present in this application patentably distinguish over the prior art. Therefore, it is requested that this application be passed to allowance.

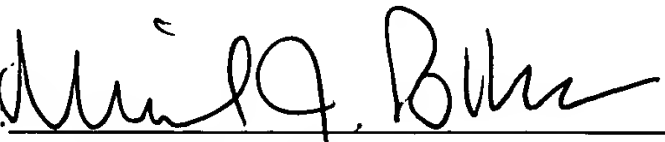
The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed, or which should have been filed herewith (or with any paper hereafter

filed in this application by this firm) to our Deposit Account No. 50-1703, under Order No. TTI-31000. **A duplicate copy of the transmittal cover sheet attached to this Response to Office Action Mailed November 10, 2005, is provided herewith.**

Respectfully submitted,

STALLMAN & POLLOCK LLP

Dated: February 22, 2007

By: 
Michael J. Pollock
Reg. No. 29,098

Attorneys for Applicant(s)